Contents Volume 95, 1992

Special Issue "Plasma Spectrometry in the Earth Sciences", by I. Jarvis and K.E. Jarvis (Guest-Editors)

Preface, by I. Jarvis and K.E. Jarvis (Guest-Editors)	vii
Plasma spectrometry in the earth sciences: techniques, applications and future trends	
I. Jarvis (Kingston-upon-Thames, U.K.) and K.E. Jarvis (Egham, U.K.)	1
An assessment of dissolution techniques for the analysis of geological samples by plasma spectrometry	1
M. Totland, I. Jarvis (Kingston-upon-Thames, U.K.) and K.E. Jarvis (Egham, U.K.)	25
	33
Application of flow injection sample introduction to inductively coupled plasma-mass spectrometry for geochemical analysis	
A.N. Eaton, R.C. Hutton (Winsford, U.K.) and J.G. Holland (Durham, U.K.)	63
Role of slurry nebulisation for the analysis of geological samples by inductively coupled plasma spectrometry K.E. Jarvis (Egham, U.K.)	. 73
Laser microanalysis of geological samples by atomic emission spectrometry (LM-AES) and inductively coupled	
plasma-atomic emission spectrometry (LM-ICP-AES)	
L. Moenke-Blankenburg and D. Günther (Halle, Federal Republic of Germany)	85
Automated analysis of geological materials: What, how and why?	05
M. Borsier (Orléans, France)	02
Strategies of multielement calibration for maximising the accuracy of geochemical analysis by inductively coupled	73
plasma-atomic emission spectrometry	
M.H. Ramsey and B.J. Coles (London, U.K.)	00
	. 99
Use of multiple internal standards for high-precision, routine analysis of geological samples by inductively coupled	
plasma-atomic emission spectrometry	
J.N. Walsh (Egham, U.K.)	. 113
Evaluation and application of reference materials for the analysis of rocks and minerals	
S. Abbey (Ottawa, Ont., Canada)	. 123
Determination of rare-earth elements, yttrium, scandium and hafnium using cation-exchange separation and inductively	
coupled plasma-atomic emission spectrometry	
P.J. Watkins and J. Nolan (London, U.K.)	. 131
Analytical errors in the determination of high field strength elements and their implications in tectonic interpretation studies	
G.E.M. Hall (Ottawa, Ont., Canada) and J.A. Plant (Keyworth, U.K.)	. 141
Application of geochemical discrimination diagrams for the tectonic interpretation of igneous rocks hosting gold mineralisation in the Canadian Shield	
G.E.M. Hall (Ottawa, Ont., Canada) and J.A. Plant (Keyworth, U.K.)	. 157
Rare-earth element composition of Devonian sediments from southern Belgium: application of an inductively coupled plasma-atomic emission spectrometry method	
I. Roelandts and A. Deblond (Sart Tilman, Belgium)	167
Trace-element chemistry of non-marine ostracods as a means of palaeolimnological reconstruction: An example from the Quaternary of Kashmir, northern India	
J.A. Holmes (Kingston-upon-Thames, U.K.), P.E. Hales and F.A. Street-Perrott (Oxford, U.K.)	. 181
Determination of metal-organic associations in soil leachates by inductively coupled plasma-mass spectrometry	
D. Beauchemin, R.K. Micklethwaite, G.W. vanLoon and G.W. Hay (Kingston, Ont., Canada)	. 191
Guide for Authors	
Announcement	199
Research Papers	
Time-dependent Soret transport: Applications to brine and magma	
R.T. Cygan (Albuquerque, N.M., U.S.A.) and C.R. Carrigan (Livermore, Calif., U.S.A.)	20

Large-scale albitisation of siltstones on Oegertakavsak island, northeast Disko Bugt, West Greenland	
F. Kalsbeek (Copenhagen, Denmark)	213
Rare-earth element geochemistry of ferromanganese crusts from the Hawaiian Archipelago, central Pacific	
E.H. De Carlo and G.M. McMurtry (Hononlulu, Hawaii, U.S.A.)	235
Sorption of rare-earth elements from seawater onto synthetic mineral particles: An experimental approach	
D. Koeppenkastrop and E.H. De Carlo (Honolulu, Hawaii, U.S.A.)	251
The geochemistry and mineralogy of the Cretaceous-Tertiary boundary at Agost (southeast Spain)	
F. Martínez Ruíz, M. Ortega Huertas, I. Palomo (Granada, Spain) and M. Barbieri (Rome, Italy)	265
Accurate and precise measurement of rock varnish chemistry using SEM/EDS	
P.R. Bierman and S.M. Kuehner (Seattle, Wash., U.S.A.)	283
Electron resonance spectroscopic evidence for the conditions and sequence of calcite mineralisation in Wall Shaft	
Mine, Derbyshire, Great Britain	
D.G. Quirk and J.B. Raynor (Leicester, U.K.)	299
Iron and graphite associated with fossil bacteria in chert	
K. Tazaki (Shimane, Japan), F.G. Ferris (Calgary, Alta., Canada), R.G. Wiese (Alliance, Ohio, U.S.A.) and	
W.S. Fyfe (London, Ont., Canada)	313
Biogeochemistry of hot spring environments, 2. Lipid compositions of Yellowstone (Wyoming, U.S.A.) cyanobacterial	
and Chloroflexus mats	
Y.B. Zeng (Bristol, U.K.), D.M. Ward (Bozeman, Mont., U.S.A.), S.C. Brassell (Stanford, Calif., U.S.A.) and	227
G. Eglinton (Bristol, U.K.)	321
cyanobacterial mat	
Y.B. Zeng (Bristol, U.K.), D.M. Ward (Bozeman, Mont., U.S.A.), S.C. Brassell (Stanford, Calif., U.S.A.) and	
G. Eglinton (Bristol, U.K.)	347
Book Reviews	
Lateritic Bauxites, by G. Bárdosy and G.J.J. Aleva — J. Konta	361
Surface and Colloid Chemistry in Natural Waters and Water Treatment, by R. Beckett (Editor) — E.M. Thurman	
Aquatic Chemical Kinetics — Reaction Rates of Processes in Natural Waters, by W. Stumm (Editor) — G. Sposito	
Contents Volume 95, 1992	365

